BSU-33B/B FIN ASSEMBLY, P/N 923AS641

NOMENCLATURE	NALC	NSN
BSU-33B/B	F782	1325-01-282-8343

LENGTH	DIA	WT	USED ON
26.11 in	15.6 in	22.1 lbs	MK 82 GP series, BLU-111 BDU-45, BDU-50

The BSU-33B/B Fin Assembly provides a low-drag configuration for the MK 82/BLU-111 general purpose and practice bombs and the BDU-45 and BDU-50 practice bombs. The BSU-33 is 26.11 inches in length, 15.6 inches in diameter with a weight of 22.1 pounds. The BSU-33 employs a quick attach mechanism with a non-reusable nyloc inserted nut to fasten the fin to the rear of the bomb body. A single allen setscrew is used to tighten the collapsible band around the bomb body. Each fin blade has a wedge with a 2.5 ° taper used to induce spin and improve stability and accuracy. The BSU-33 has a fuze access cover held in place by means of three fasteners.

The fins and subassemblies are fabricated from steel alloys, cut, formed, machined, assembled, and welded to drawing requirements. Outer surfaces are powder coated in accordance with WSD-C-0181 TGIC Polyester Powder Coating specification. Specialized skills and processes required include welding, heat-treating, machining, metal forming, and coating applications. The BSU-33 is palletized using the ADU-426/E Pallet Adapter, manufactured or procured by the contractor.

MK 83 CONICAL FIN, P/N 923AS400

NOMENCLATURE	NALC	NSN
MK 83 MOD 1	EA96	1325-01-458-5888

LENGTH	DIA	WT	USED ON
42.98 in	19.62 in	56.8 lbs	MK 83 GP series/ BLU-110

The MK 83 MOD 1 Conical Fin provides a low-drag configuration for the MK 83/BLU-110 general purpose and practice bombs. The MK 83 is 42.98 inches in length, 19.62 inches in diameter with a weight of 56.8 pounds. The MK 83 is attached to the bomb body by use of six setscrews. The MK 83 has a fuze access cover held in place by a fastener.

The fins and subassemblies are fabricated from steel alloys, cut, formed, machined, assembled, and welded to drawing requirements. Outer surfaces are powder coated in accordance with WSD-C-0181 TGIC Polyester Powder Coating specification. Specialized skills and processes required include welding, heat-treating, machining, metal forming, and coating applications. The MK 83 is palletized on a MK 3 Pallet, which is provided by the government.

MK 84 MOD 0 CONICAL FIN, P/N 1380529

NOMENCLATURE	NALC	NSN
MK 84 MOD 0	F607	1325-00-009-5573

LENGTH	DIA	WT	USED ON
49.09 in	25.31 in	114 lbs	MK 84 GP series / BLU-117

The MK 84 MOD 0 Conical Fin provides a low-drag configuration for the MK 84/BLU-117 general purpose and practice bombs. The MK 84 is 49.09 inches in length, 25.32 inches in diameter with 114 pounds. The MK 84 is attached to the bomb body by use of eight setscrews. The MK 84 has a fuze access cover held in place by fasteners.

The fins and subassemblies are fabricated from steel alloys, cut, formed, machined, assembled, and welded to drawing requirements. Outer surfaces are powder coated in accordance with WSD-C-0181 TGIC Polyester Powder Coating specification. Specialized skills and processes required include welding, heat-treating, machining, metal forming, and coating applications. The MK 84 is palletized in accordance with special packaging instructions F00-009-5573.

BSU-85/B AIR INFLATABLE RETARDER, P/N 1634AS100

NOMENCLATURE	NALC	NSN
BSU-85/B	1W73	1325-01-218-8419

LENGTH	DIA	WT	USED ON
39.2 in	12.85 in	90 lbs	MK 83 / BLU-110

The BSU-85/B Air Inflatable Retarder (AIR) Fin is designed for low altitude, high speed, high drag weapon delivery or unretarded, low drag weapon delivery. The BSU-85 is used with MK 83/BLU-110 general purpose and practice bombs. The BSU-85 is 29.30 inches in length, 12.94 inches in diameter with a weight of 90 pounds. The fin is attached to the bomb body by eight setscrews. The BSU-85 uses a ballute (combination balloon and parachute) air bag, which deploys from the tail to provide a high speed, low altitude delivery capability by quickly slowing the bomb and allowing the aircraft to escape the blast pattern. The tail assembly consists of a low-drag canister unit containing the ballute, and a release lanyard assembly that opens the canister releasing the ballute. The ballute assembly is made from high strength low porosity nylon fabric. When the bomb is released from the aircraft a lanyard unlatches the back cover, which opens, releasing part of the nylon ballute. Air turbulence at the rear of the bomb acts on that portion of the ballute, pulling the remainder out of the housing. Ram air inflation is accomplished through four air inlet ports toward the aft end of the ballute. The weapon is delivered in the low-drag mode when the canister remains closed after release. The weapon is delivered in the high drag mode when the canister is opened after release.

Each fin blade has a wedge with a 13 ° taper used to induce spin and improve stability and accuracy. The BSU-85 has a fuze access cover held in place by a fastener.

Specialized skills and processes required include welding, heat-treating, machining, metal forming, and coating applications (paint and phosphate). Necessary skills and facilities for sewing the large nylon ballute are also required. The BSU-85 is packaged in the CNU-419 B/E container, which is to be manufactured or purchased by the contractor. The BSU-85 is palletized using the MK 3 Pallet, which is government furnished.

BSU-86 A/B FIN, P/N 923AS346

NOMENCLATURE	NALC	NSN
BSU-86A/B	EA53	1325-01-437-8275

LENGTH	DIA	WT	USED ON
26.5 in	18.5 in	65 lbs	MK 82 series / BLU-111 BDU-45, BDU-50

The BSU-86 A/B Retarder Fin is used with MK82/BLU-111 general purpose and practice bombs and BDU-45 practice bomb. The BSU-86 provides high drag (retarded), low altitude, high speed weapon delivery or low drag (unretared) weapon delivery. The BSU-86 is 25.7 inches in length, 18.56 inches in diameter with a weight of 66 pounds. The BSU-86 is attached to the bomb body by eight setscrews. Each fin blade has a 25° wedge to induce spin and improve stability and accuracy. The BSU-86 has a MAU-199 spring arming wire (SAW) located between the convolutes of the top fin blade and is in line with the bomb lugs. The SAW is used to operate the fin-opening sequence so that the bomb/fin combination is well clear of the aircraft before opening. When the SAW is activated, the spring load under each fin blade initiates the fin opening. The airstream drives the fin open rapidly. The opening shock is absorbed by the shock absorber. The bomb rack end of a 0.093-inch, stainless steel arming wire is attached to a 300- pound break link; whereas, the fin-release band end is secured to a safety (DEXTER) release clip. A spring with one end secured to the housing is inside the SAW. An eyelet through which the stainless steel arming wire passes is on the other end of the spring. The spring aids in retaining the arming wire inside the housing by maintaining tension. As the bomb clears the bomb rack, the arming wire plays out, stretching and deforming the spring. The safety clip is deformed and pulls out, opening the release band about three to four feet from the bomb rack. After the wire is completely played out, the break link feels the increased weight parts at the pull ring. The bomb drops away, taking the entire arming wire with it, and only the pull ring remains attached to the aircraft.

Special skills and processes required include welding, heat treating, machining, metal forming, and coating applications (paint and phosphate). The BSU-86 is palletized on MK 3 Pallets, which are government furnished. The BSU-86 also uses ADU-535/E Pallet Adapters for shipping and are to be manufactured or procured by the contractor.

Potential contract or contracts that could result from this RFP is detailed below. Offers will be on an all or none basis; however, the government reserves the right to make any combination of awards that are considered in the best interest of the government. The following is a list of possible awards:

1) The total quantity of all fins, with options for four (4) Fiscal Years (FY) there after, FY07, FY08, FY09, and FY10.

2) 100% of each item as a separate contract, with options for four Fiscal Years (FY) FY07, FY08, FY09, FY10.

3) Partial award of one or more item(s) on separate contracts, with options for four Fiscal Years (FY) FY07, FY08, FY09, FY10.

4) Partial award of all items with options for four Fiscal Years (FY) FY07, FY08, FY09, FY10.